4310-70
DEPARTMENT OF THE INTERIOR

National Park Service

36 CFR Part 7

RIN 1024-AC91

Personal Watercraft Use at Lake Mead National Recreation Area

AGENCY: National Park Service

ACTION: Final Rule

SUMMARY: This rule designates areas where personal watercraft (PWC) may be used in Lake Mead National Recreation Area, Nevada and Arizona. This rule implements the provisions of the National Park Service (NPS) general regulation 36 CFR 3.24, authorizing parks to allow the use of PWC by promulgating a special regulation. The NPS Management Policies 2001 provides that individual parks should determine whether PWC use is appropriate for a specific park area based on an evaluation of that area's enabling legislation, resources and values, other visitor uses, overall management objectives, and consistent with the criteria of the NPS for managing visitor use. This rule authorizes the use of PWC at Lake Mead National Recreation Area consistent with the Record of Decision for Lake Management Plan dated [insert date of ROD here]

EFFECTIVE DATE: This rule becomes effective upon publication in the Federal Register.

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SUPPLEMENTARY INFORMATION:

Personal watercraft use and Regulatory Background

In May 1998 the Bluewater Network, a coalition of more than 70 organizations, filed a petition urging the National Park Service to initiate the rulemaking process to prohibit PWC use throughout the National Park System. In response to the petition, the NPS proposed a specific PWC regulation premised on the notion that PWC use should be evaluated by the individual park area to determine if the use is an appropriate use of the park (63 FR 49,312, Sept. 15, 1998).

The NPS envisioned the servicewide regulation as an opportunity to evaluate impacts from PWC use before authorizing the use. The preamble to the servicewide

regulation calls the regulation a "conservative approach to managing PWC use" considering the resource concerns, visitor conflicts, visitor enjoyment, and visitor safety. During a 60-day comment period, the NPS received nearly 20,000 comments.

After reviewing the public comments and further review, the NPS promulgated a final regulation that prohibited PWC use in all units, until the individual park areas determine PWC appropriateness for continued use (36 CFR 3.24(a), 65 FR 15,077–90, Mar. 21, 2000). The final rule provided a 2-year grace period for 21 parks. Specifically, the regulation allowed the NPS to designate PWC areas and to continue PWC use by promulgating a special regulation in park areas, including Lake Mead National Recreation Area. Ten NRA's were given an additional option of authorizing PWC use through the units' superintendents' compendium (36 CFR 3.24(b)), but only if the requirements of 36 CFR 1.5 were met. This additional designation method was provided for in the units because of their congressional designation as national recreation areas and specific congressional intent to provide for motorized watercraft use in these parks.

In response to the PWC final regulation, Bluewater Network sued the NPS. The organization challenged the National Park Service decision to provide a 2-year grace period allowing continued PWC use in 21 park units while prohibiting PWC use in other park units. In addition, the organization also disputed the National Park Service decision to allow 10 park units the additional option of authorizing continued PWC use after 2002 using the procedures of the superintendents' compendium (36 CFR 1.5), which would not require the opportunity for public input through a notice and a comment rulemaking process.

In response to the suit, the National Park Service and the environmental group negotiated a settlement. The resulting settlement agreement accepted by the court on April 12, 2001, required each of those parks authorizing continued PWC use must promulgate a park-specific special regulation. The settlement agreement acknowledged that the NEPA analysis must, at a minimum, evaluate PWC impacts on water quality, air quality, soundscapes, wildlife, wildlife habitat, shoreline vegetation, visitor conflicts, and visitor safety.

In 2001 the National Park Service adopted its revised NPS Management Policies (NPS 2001) for the National Park System. The policy document included a provision addressing PWC use in park units and the need for proper evaluation before authorizing use in a specific park unit (8.2.3.3). The policy states that the use should be evaluated based on the park's enabling legislation, resources, values, other park uses, and overall management strategies.

On September 5, 2002, the National Park Service published a draft rule for the operation of PWC at Lake Mead NRA(67 FR 56785-94). The proposed rule for PWC use was based on alternative C (the preferred alternative) in the *Draft Environment Impact Statement / Lake Management Plan* (DEIS/LMP). The 60-day public comment period on the proposed rule ran from September 5 to November 4, 2002.

Overview of Recreational Use and Personal Watercraft

The NPS is granted broad statutory authority under various acts of Congress to manage and regulate water activities in areas of the National Park System, 16 U.S.C. 1, 1a-2(h) and 3. The NPS Organic Act, 16 U.S.C. 1 et seq., authorizes the NPS to "…regulate the use of Federal areas known as national parks, monuments, and

reservations… by such means and measures as conform to the fundamental purpose of the said parks… which purpose is to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." Congress has also emphasized that the "…authorization of activities shall be construed and the protection, management, and administration of these areas shall be conducted in light of the high public value and integrity of the national park system and shall not be exercised in derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress." 16 U.S.C. 1a-1. The appropriateness of a visitor use or recreational activity will vary from park to park. NPS Management Policies states that "… the laws do give the Service the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, so long as the impact does not constitute impairment of the affected resources and values" (1.4.3). NPS Management Policies provide further that, "…preserving park resources and values unimpaired is the core, or primary responsibility of NPS managers…. In cases of doubt as to impacts of activities on park natural resources, the Service will decide in favor of protecting the natural resources."(4: 1).

The Organic Act and the other statutory authorities of the NPS vest us with substantial discretion in determining how best to manage park resources and provide for park visitors. "Courts have noted that the Organic Act is silent as to the specifics of park management and that 'under such circumstances, the NPS has broad discretion in determining which avenues best achieve the Organic Act's mandate… Further, the NPS is empowered with the authority to determine what uses of park resources are proper and what proportion of the park resources are available for each use" Bicycle Trail Council of Marin v. Babbitt, 82 F.3d 1445, 1454 (9th Cir. 1996), quoting National Wildlife Federation v. National Park Service, 669 F. Supp. 384, 390 (D.Wyo.1987). In reviewing a challenge to NPS regulations at Everglades National Park, the court stated, "The task of weighing the competing uses of Federal property have been delegated by Congress to the Secretary of the Interior… Consequently, the Secretary has broad discretion in determining how best to protect public land resources." Organized Fisherman of Florida v. Hodel, 775 F.2d 1544, 1550 (11th Cir. 1985), cert. denied, 476 U.S. 1169 (1986).

Over the years, NPS areas have been impacted with new, and what often prove to be controversial, recreational activities. These activities tend to gain a foothold in NPS areas in their infancy, before a full evaluation of the possible impacts and ramifications that expanded use will have on the area can be initiated, completed and considered. PWC use fits this category.

PWC use is a relative new recreational activity at Lake Mead NRA. PWC, primarily stand-up models, were first observed on Lakes Mead and Mohave in the mid-1970s. In the 1980s, the first sit-down models were available with one- or two-person capacities. During this time, PWC were manufactured by four companies, the first PWC magazines were published and the typical cost of a PWC was $6,600.

From the mid-1980s through the 1990s, sales grew rapidly, then leveled off starting in the mid-1990s. According to visitor use surveys in 1993, the use of PWCs at Lake Mead NRA during this time constituted 15% of the boats on the water at any one

time. A rapid increase in PWCs was observed in 1994, when their use jumped to 30% of the boats on the water at any one time.

Today monitoring shows that PWC use constitutes 35% of the boats on the water at any one time. There are 11,000 PWC registered in Clark County, Nevada and thousands more in the region surrounding Lake Mead NRA. The highest densities are observed in the urban interface areas of Lake Mead and in the southern portions of Lake Mohave.

Changes to the Final Rule

Some changes have been made in the Lake Management Plan/Final Environmental Impact Statement. Five percent of the park waters will be managed for primitive and semiprimitive recreational settings. This is an increase of three percent over the acreage in the draft rule. PWC use is prohibited in primitive and semiprimitive zones.

Bonelli Bay in the southern portion of the Virgin Basin was added to the semiprimitive zone on Lake Mead, as was the Lake Mead confluence with the Muddy River. These two areas account for the increased acreage in the semiprimitive zoning over the draft plan. The Overton Wildlife Management Area boundary defines the semiprimitive area of the Muddy River confluence and it is presently managed during the waterfowl hunting season as a flat wake area. This revision prohibits the use of PWC in the Overton Wildlife Management Area year-round.

The recreational zoning in Black Canyon has been modified to allow additional boating access for five days per week during the peak boating season between Memorial Day and Labor Day each year. During this period the canyon will be managed as rural natural zone with no special speed or horsepower restrictions. PWC use in the canyon is authorized during this period. The remainder of the year Black Canyon will be managed for semiprimitive conditions with a 65-horsepower maximum. As proposed in the LMP/DEIS, Black Canyon will be managed as a primitive setting two days per week (Sunday and Monday) year round.

In response to comments from the States of Arizona and Nevada, the proposed 100-foot flat wake zone around the entire lakes has been revised to a 200-foot flat wake zone around beaches occupied by bathers, around boats at the shoreline and a person in the water or at the shoreline. This revision is more closely aligned with existing Nevada boating law and allows the NPS to move toward the goal of providing unified boating law for the interstate waters of Lakes Mead and Mohave.

There are a number of actions that will require subsequent rulemaking in the implementation of the Lake Management Plan. This rule has been tailored specifically to address PWC operation in response to the general regulation in 36 CFR 3.24 prohibiting PWC use except by special regulation. The National Park Service focused specifically on PWC to prevent or minimize the period that PWC use would be restricted at Lake Mead NRA. It is the National Park Service's intention to move ahead with the additional rulemaking that will apply the flat-wake rule to all watercraft and to implement other aspects of the approved Lake Management Plan (LMP).

Summary of Comments

A proposed rule was published for public comment on September 5, 2002 (67 FR 56,785-94), with the comment period lasting until November 4, 2002. The NPS received

1,696 timely written responses regarding the proposed regulation. Of the responses, 1,636 were form letters in 3 separate form letter formats and 60 were individual letters. There were 1,060 electronic mailings. Responses received included 51 from individuals, 2 from businesses, 5 from organizations and 2 from public agencies.

Within the analysis, the term "commenter" refers to an individual, business, or organization that responded. The term "comments" refers to statements made by a commenter.

General Comments

1. There were a variety of commenters, including the Personal Watercraft Industry Association and United States Coast Guard (USCG), who proposed the flat wake zone should apply to all motorized vessels

NPS Response: The National Park Service concurs with the commenters. The preferred alternative in the LMP has been modified and clearly applies the flat wake zone to all motorized vessels. The intention of the flat wake zone is to provide a safe shoreline environment for water recreation. The Lake Management Plan has been modified based on public comment and consultation with the respective states of Nevada and Arizona to read, "A 200-foot flat wake zone will be applied to all beaches occupied by bathers, boats at the shoreline, swimmers in the water or persons at the shoreline." A future rulemaking will extend this provision to all boats.

2. The PWIA requested that PWC used for water-skiing and wakeboarding be permitted to launch from the shoreline like other motorized boats.

NPS Response: The NPS agrees. The intention the Lake Management Plan is to afford PWC the same setting for beach starts for water-skiing purposes as other motorized boats. Persons operating boats would need to be at flat wake speed only if they are within 200-feet of a beach occupied by bathers, a boat at the shoreline or a person in the water or at the shoreline. It is the intention to apply this rule to all boats and this will be accomplished with a separate rulemaking as described in the preceding comment response.

3. There were a number of comments stating that restricted PWC use should be permitted in Black Canyon

NPS Response: The preferred alternative in the final environmental impact statement (EIS) has been revised for recreational use of Black Canyon, allowing restricted PWC use. The final EIS states, "In this area, temporal zoning would be applied, providing a range of recreational settings. The area would be managed for a primitive setting two days per week on a year-round basis. Between Labor Day and Memorial Day, the area would be managed for a semiprimitive setting five days per week. During the summer months between Memorial Day and Labor Day, the area would be managed for a rural natural setting with only houseboats, waterskiing, and wakeboarding prohibited. PWC use is consistent with the rural natural setting. However, due to the narrow canyon setting in Black Canyon (zones 8 and 9), PWC use would be monitored during this period and restricted if the safety of lake users becomes an issue. This would be determined by observed/reported conflict information and boating incidents." This authorization has been specifically included in the final rulemaking.

4. Numerous commenters stated that the National Park Service is suggesting that one type of recreational experience is more meaningful than another.

NPS Response: The NPS disagrees that we place a higher value on a one type of recreational experience over another. The implication is that we place less value on PWC use than other forms of recreation. The Organic Act and the Lake Mead enabling legislation are the standards by which the National Park Service manages recreational activities. For Lake Mead NRA we have evaluated PWC use and are authorizing their continued use throughout 95% of the park waters.

5. Many commenters believed they should be able to use their USCG legal boat in every waterway where similar motorized boating activity occurs (i.e. water skiing, wake boarding, speed boating, etc.) They suggested the Lake Mead regulation should be based on engine type not hull design.

NPS Response: The National Park Service definition of PWC as noted in the draft and final EIS under the "Purpose of and Need for the Plan" chapter, "Background" section under "Personal Watercraft Use Regulatory Background" is as follows: Personal watercraft refers to a vessel, usually less than 16-feet in length, which uses an inboard, internal combustion engine powering a water jet pump as its primary source of propulsion. The vessel is intended to be operated by a person or persons sitting, standing, or kneeling on the vessel, rather than within the confines of the hull.

As presented in the description of the alternatives in the draft and final EIS, the National Park Service evaluated and chose the best regulatory approach in the preferred alternative in order to maintain the opportunities for various types of recreation while protecting the resources of the Lake Mead NRA. Some elements of the final EIS modified preferred alternative/final rule, such as the proposed recreational opportunity zoning, regulate PWC separately from other motorcraft, while other aspects, such as the flat wake zone and phase-out of old engine technology, regulates engine type instead of hull design.

6. We received numerous comments citing the Organic Act and the mission of the National Park Service to leave the resources and wildlife under its care "unimpaired for the enjoyment of future generations." We received a number of letters stating, federal law clearly prohibits activities that impair or derogate the NPA's resources or values.

NPS Response: The "Introduction" section of the "Environmental Consequences" chapter under "Summary of Laws and Policies" in the draft and final EIS summarizes the three overarching laws which guide the NPS in making decisions concerning protection of park resources. These laws, as well as others, are also reflected in the NPS Management Policies. In addition, in the "Methodology" section under the heading "Impairment Analysis," the EIS explains how the NPS applied these laws and policies to analyze the effects of PWC on Lake Mead park resources and values.

An impairment to a particular park resource or park value occurs when in the professional judgment of the responsible NPS manager the impact would harm the integrity of park resources or values, including the opportunity that otherwise would be present for the enjoyment of those resources or values. In making these determinations, the NPS managers must consider the provisions of the park's enabling legislation. For

each resource topic, the draft and final EIS establishes thresholds or indicators of magnitude of impact. Should the impact approach a “major” level of intensity, it is one indication that impairment could result. For each impact topic, when the intensity approached “major,” the team would consider mitigation measures to reduce the potential for “major” impacts, thus reducing the potential for impairment.

In response to growing concern regarding potential impacts from PWC, the National Park Service began an extensive review and regulation process. While comments were received opposing continued use of the vessel within units of the park system, other comments supported its use with certain conditions designed to protect park resources and values. Recognizing that some units needed to complete more local planning and analysis of impact was needed, the final servicewide PWC regulation provided for specified local decision-making on a park by park basis.

The servicewide regulation recognized the need for park areas wishing to continue PWC use to undertake and complete an analysis of the impacts to park resources and values that could result from continued use

In the draft and final EIS, three of the four alternatives analyzed various PWC scenarios, along with other vessel management and recreational objectives. The alternatives also consider means to mitigate the effects of PWC on park resources and values, including limiting use in areas where management objectives strive to create a visitor experience without these vessels or where sensitive park resources must be protected. The modified preferred alternative in the final EIS includes mitigation measures to protect other park users from potential conflicts with PWC (see the modified preferred alternative in the “Environmental Consequences” section of the FEIS), as well as other measures to protect species of special concern, water, and air resources.

The conclusion of the modified preferred alternative in the final EIS, was that continued PWC use, would not result in an impairment of park resources and values for which the Lake Mead Recreation Area was established to protect for future generations.

7. We received one comment from an individual who suggested we establish a Citizens Recreational Taskforce to address the future management of recreational use at Lake Mead NRA.

NPS Response: The rule takes a balanced approach to the management of PWC use within Lake Mead NRA. It takes into consideration resource impacts, conflicts with other visitors’ use and enjoyment and safety concerns. It requires promulgation of park-specific regulation which is the same regulatory approach the National Park Service has taken to manage off-road vehicle use (36 CFR 4.10), aircraft, including powerless hang-gliders (36 CFR 2.17), and use of bicycles outside of developed areas (36 CFR 4.30(b)). This rule prohibits PWC use in areas where their use is inconsistent with the management objectives based on the Organic Act, enabling legislation, resources, values, and other visitor uses.

The National Park Service met with a wide variety of user groups concerning the management of recreational use of park waters. A listing of these meetings and organizations is included in the final EIS. These meetings represent the National Park Service approach to seeking specific user group input into the planning and decision

making process. Because the park plans to continue this process, we do not think that a citizen's recreational taskforce is necessary.

Comments related to Socioeconomic Resources

8. There were one or more commenters who expressed concern for the impact of the rule on the local economies of Laughlin/Bullhead City and the Las Vegas area.

NPS Response: The estimates (under alternative C) presented in the Economic Analysis of Personal Watercraft Regulations in Lake Mead NRA (NPS 2002), use 2012 as engine phase-in date when all two-stroke and four-stroke engines would have to become fuel injected, in accordance with EPA regulations. This date would cover the current life expectancy specified by the Personal Watercraft Industry Association of 5 to 7 years and the EPA estimate of 10 years. Under alternative C (the modified preferred), the National Park Service assumes that, as a result of PWC restrictions, businesses could experience a 5% reduction in PWC sales, service, and rentals related to the park. Some of this impact could occur as a result of engine-type restrictions, but there are also geographic restrictions proposed under this alternative that were taken into account. However, even under alternative A, as detailed in the draft and final EIS, where there would be a 100% reduction in PWC revenues related to the park, the impact on the regional economy would be very small, less than 0.1% of total economic activity.

The National Park Service expects that by 2012, most boat owners would already be in compliance with the 2006 EPA marine engine standards. The impact from the engine standards on boat owners is expected to be minimal. PWC manufacturers currently offer some models that are compliant with EPA's 2006 standards and PWC purchased after 2006 would be made compliant. Because the life of a PWC is estimated at 5 to 10 years (see final EIS, the "Introduction" section in the "Purpose and Need for the Plan" chapter), it is expected that the majority of noncompliant PWCs would no longer be in operation when the engine restrictions proposed under alternative C take effect in 2012. In addition, according to industry reports, it appears that the trend for conversion is toward the four-stroke model engines instead of direct injection two-stroke models. According to the PWIA, the two top selling PWC models for 2002 incorporated the four-stroke technology. Also, in discussions with PWC retailers in the vicinity of Lake Mead, NPS has been informed that the majority of new PWC purchases have been four-stroke engines.

It may be reasonable to assume that people shopping before 2006 for new watercraft would only consider purchasing those models with compliant engines in response to the public announcement that only 2006-compliant engines would be allowed at Lake Mead NRA after 2012. It is the NPS intention that the 10-year advance notice will provide ample opportunity for people to consider engine compliance when making a purchase.

Comments related to safety and visitor conflicts

9. There were numerous comments stating that "much attention has been given to so-called "cleaner and quieter" PWC. They say these machines do not solve all problems associated with the PWC and cite recent research studies that find that the new technology emits as much or more carbon monoxide and nitrogen oxide.

NPS Response: The NPS agrees that the new technology will not solve all the problems, but they do provide major improvements in a number of areas specifically in air quality and water quality. Because the cleaner four-stroke and two-stroke direct injected engines will emit more nitrogen oxide due to a higher ratio of fuel actually being burned, they emit less hydrocarbons, which reduces the likelihood of ozone formation. The newer engine technology will not reduce impacts to wildlife from factors such as noise or use of the craft in close proximity to wildlife but this problem is common to all vessels to various extents. However, phasing in of the new technology would reduce impacts to aquatic and shoreline species by greatly reducing the discharge of fuel components such as benzene, toluene, ethyl benzene, and BTEX into the water as stated in the draft and final EIS in the "Methodology" section in the "Environmental Consequences" chapter.

The safety record of PWC at Lake Mead can be improved by measures such as boater safety education. The preferred alternative in the draft EIS and the modified preferred alternative in the final EIS proposes a requirement of boater safety training for all vessel operators born after 1983. States such as California report operator inexperience as the leading cause of PWC-related accidents (NTSB 1998). Boater education incorporating PWC-specific instruction has been shown to reduce PWC accidents in Connecticut and Michigan (NTSB 1998).

The industry's conversion to the four-stroke technology and the use of resonators is reducing the noise. Manufacturers are using noise absorbing foam and rubber padding in the construction of PWCs. Consequently, the newer technology used in PWC construction is addressing noise concerns and improvements are being observed at Lake Mead NRA.

10. There were additional comments concerning the safety record of PWC.

NPS Response: Safety is an issue for all boaters, including PWC users. Boating safety issues for the Lake Mead NRA are described in the "Recreational Use of the Lake" section of the "Affected Environment" of the FEIS. Under the modified preferred alternative, unified boating laws for Lake Mead and Lake Mohave are proposed, including the requirement of boater safety education for any boater born after 1983. When applicable, the operator of a boat/vessel would be required to have in his/her possession, proof of completion of a safety course meeting the requirements of the National Association of Boating Law Administrators while operating a boat/vessel.

Safety is further addressed under the modified preferred alternative in the final EIS, where a 200-foot flat wake zone would apply to beaches occupied by swimmers, boats at the shoreline, and people at the shoreline or in the water. Coordination with the states of Nevada and Arizona would be required in order to achieve the desired uniformity of the proposed boating regulations.

When implemented, these safety measures would increase the safety of participating in all forms of recreation at Lake Mead NRA. Consequences of the preferred alternative in relation to PWC safety are described in the "Environmental Consequences" section of the draft and final EIS.

11. We received comments that cited user conflicts. Specific incidents included conflicts between PWC and kayakers, fishermen, and swimmers. A few PWC supporters

said these conflicts resulted from a minority of inconsiderate PWC operators and that we should regulate inappropriate behavior or enforce existing regulations rather than prohibit PWC use.

NPS Response: The National Park Service is pursuing specific measures to provide a safe shoreline environment and to minimize conflict between user groups. Specifically, a 200-foot flat wake zone is proposed around beaches occupied by bathers, boats at the shoreline and people in the water or at the water's edge. This rule is designed to improve the shoreline environment on both reservoirs.

In addition, 5% of the park waters have been zoned as primitive or semiprimitive where the management objectives are for a more quiet and tranquil setting. Visitors seeking this environment can visit these areas with some expectation of slower speeds and quieter boat operations. In these areas PWCs are prohibited and other boating use will be limited to flat wake speeds and/or electric trolling motors.

Comments related to the phase out of carbureted two-stroke engines

12. Some commenters cited the inefficiency of the carbureted two-stroke engines

NPS Response: We are concerned about pollution in any form, and exhaust gasses from two stroke marine engines is no exception. We recognize that a certain amount of exhaust smoke and smell is inherent with any two-cycle engine and that the comments addressed excessive amounts from PWC. We acknowledge the findings of the Environmental Protection Agency's (EPA) 1991 study that indicate two stroke engines lose roughly 25% of the fuel they consume unburned into the water, resulting in high levels of hydrocarbon emissions from these engines. The excessive smoke and smell from PWC could be attributed to unique operational characteristics of those vessels. PWC are often operated with throttle settings that transition from idle to full throttle and back to idle, typically in a rapid and repeated sequence. In response to these concerns, the rule will phase out the carbureted two-stroke engines over a ten-year period.

13. There were comments that suggested the 2012 prohibition on carbureted two-stroke engines is unnecessary.

NPS Response: As noted in alternative C in the draft and final EIS, two-stroke PWC and outboard vessels would be barred from Lake Mead NRA beginning in 2012 as a result of the prohibition on carbureted two-stroke engines. However, even with the increasing availability of new technology four-stroke and direct injection two-stroke engines, it is estimated by EPA that by 2012, they would only comprise approximately 50 percent of PWC in use at that time.

According to the Personal Watercraft Industry Association, PWC models on the market today include the new technology reduced-emissions vessels (http://www.pwia.org facts_release.htm#qa) and the two top selling models in 2002 were four stroke models. The NPS has also learned in discussion with local PWC retailers that the majority of new PWC purchases have been four-stroke engines. The industry shows this trend, combined with the relatively short operating life of PWC, which range from 5 to 10 years (depending on the source), would result in only a small number of PWC users who would be displaced when the restrictions go into effect. The NPS hopes the industry prediction is correct. But if less than 100% of the PWCs in 2012 are the new technology

reduced emission PWCs, then the PWC restriction will take effect and ensure that the resources of the park will be protected.

Comments related to general environmental impacts

14. Some commenters were concerned that the Service often lacks site-specific studies upon which to base a sound judgement on PWC use at Lake Mead. The commenters also pointed out that the National Park Service appears to overlook important studies which detail the damage these machines cause to the environment and wildlife.

NPS Response: The NPS utilized site specific studies to evaluate air quality, water quality, cultural resources and visitor use in the LMP/FEIS. Shoreline vegetation in this arid setting is primarily composed of exotic salt cedar so site specific inventories were limited to sensitive inflow areas. Specific studies were not initiated for the wildlife and soundscape analyses.

The NPS determined that site-specific studies of PWC impacts on wildlife were not necessary given the limited extent of native shoreline vegetation and its limited value to wildlife. As stated in the "Natural and Cultural Resources" section of the "Affected Environment" chapter of the draft and final EIS "… the majority of the shoreline in the recreation area contains nonnative salt cedar (*Tamarix* spp.), with relatively few areas supporting native vegetation. Fluctuating water levels along the shoreline make restoration of vegetation communities impossible in most situations."

In those few areas where there is shoreline habitat that is valuable for wildlife, such as in the willow scrub inflow areas of the Virgin and Muddy Rivers where neotropical migratory songbirds potentially nest, primitive and semiprimitive zones are proposed under the modified preferred alternative which would prohibit PWC use, waterskiing, and wakeboarding. Given the overall lack of wildlife habitat along most of the remainder of the National Recreational Area's shoreline, and the fact that PWC would be prohibited in the few areas that are deemed valuable for wildlife, the park has identified sensitive vegetation and shoreline habitat and has incorporated appropriate mitigation measures into the modified preferred alternative in the final EIS. Regarding fisheries of Lake Mead NRA, the modified preferred alternative in the final EIS proposes to use temporal shoreline zonings to reduce and/or prevent impacts to shallow water spawning areas

The *U.S. Fish and Wildlife Service Biological Opinion* is included in the final EIS in appendix F. The biological opinion has concurred with the National Park Service determination that the preferred alternative is not likely to jeopardize the continued existence of the Southwestern willow flycatcher, bonytail chub, razorback sucker, or desert tortoise, and is not likely to destroy or adversely modify designated critical habitat for bonytail, razorback, or tortoise. In addition, the U.S. Fish and Wildlife Service agreed with the determination of no effect on the bald eagle and Yuma clapper rail. The mitigation adopted under the modified preferred alternative in the final EIS includes measures to protect spawning and nesting areas.

There is no definitive literature describing scientific measurements of PWC noise (see DEIS, p. 144). To address this lack of scientific data, the National Park Service contracted noise measurements of motorized vessels, including PWC, at Glen Canyon in

2001. The noise source data from this study was used in the Lake Mead draft and final EIS soundscape analysis because the results were not dependent upon or influenced by park geology or other environmental factors.

At Glen Canyon, sound measurements were made of a number of boats and PWC as they passed by a microphone mounted above the front of an instrumented boat. As stated in the technical report (NPS, 2002 or HMMH, 2002 - *Draft Technical Report on Noise: Personal Watercraft and Boating Activities at Glen Canyon National Recreation Area*), controlled pass-by measurements of three PWC and one motorboat were conducted at several different speeds. Many boats and PWC were also randomly measured. In all cases, a radar gun was used to determine speed and a laser range finder was used for distance. After normalizing measurements to a common distance, maximum sound levels were computed both for 15 and 25 meters, the distance at which National Park Service watercraft noise emission regulations apply. One of the conclusions from the measurements at Glen Canyon was that, except for the boats with V-8 engines (which were louder), no significant differences were found in the sound levels produced by PWC and the other boats that were measured in the study.

Comments related to Water Quality

15. Some comments expressed concern about the amount of raw fuel spilled into the water or on the shoreline when PWC were refueled by owners/operators at sites other than fuel docks.

NPS Response: The refueling of boats at the shoreline is legal. Illegal refueling occurs when the refueling results in the pollution or contamination of park waters. As noted in the final EIS under alternative C, "Resource Protection" section, the spillage of fuel during shoreline operations is a concern at Lakes Mead and Mohave. Polluting or contaminating park waters during refueling, including fuel spillage, is a citable offense under 36 CFR, 2.14(a)(6). Safe refueling practices need to be included in boating safety courses. The National Park Service will recommend the States of Nevada and Arizona including these procedures as part of the boating education curriculum.

16. A single commenter stated, the proposed rule, at page 56790, states that "based on fuel consumption estimates, between 1½ and 3 gallons of fuel is discharged into the water during a two-hour ride on a PWC. The rule goes on to say that during the summer weekends in high use areas, there are as many as 1,700 PWCs on the lakes, which "could result in 1,275 and 3,400 gallons of unburned fuel discharged per hour into Lakes Mead and Mohave combined." The commenter goes on to say that these statements are nonsense and supported by no technical information.

NPS Response: The National Park Service is concerned about pollution in any form and exhaust gasses from two-stroke marine engines is no exception. We recognize that a certain amount of exhaust smoke and smell is inherent with any two-stroke engine and that the comment addressed excessive amounts from PWC. We acknowledge the findings of the Environmental Protection Agency's (EPA) 1991 study that indicate two stroke engines lose roughly 25% of the fuel they consume unburned into the water, resulting in high levels of hydrocarbon emissions from these engines. The smoke and smell from PWC could be attributed to unique operational characteristics of those vessels. PWC are

often operated with throttle settings that transition from idle to full throttle and back to idle, typically in a rapid and repeated sequence. These are the basis for the above analysis. While some PWC are converting to the new technology, the percentage of the PWC fleet has not yet made the conversion to the more efficient models. Consequently, the calculation of the potential discharge is valid.

17. One comment stated, the primary water quality concern that has been identified regarding continued PWC use is the discharge of unburned gasoline and gasoline additives from conventional carbureted two-stroke engines, as well as the spilling of such components during refueling(National Park Rulemaking at page 56790, DLMP/EIS (Lake Management Plan/Draft EIS) at pages 102, 133, 124, 188). PWC emissions in the Lake Mead area have already been reduced 25% below the 1998 baseline conditions.

NPS Response: We agree that water quality impacts from PWC and other carbureted two-stroke engines have declined since 1998 due to the conversion of carbureted two-stroke engine technology to cleaner technology. However, our goals for the reduction of emissions cannot be achieved without the proposed 2012 restrictions.

The final EIS addresses impacts from PWC use as well as all watercraft on Lake Mead and Lake Mohave. Four alternatives were analyzed. Alternative A would continue the prohibition of use of PWC in the Lake Mead NRA. Alternative B would prohibit all carbureted two-stroke engines beginning in 2004. Alternative C assumes a ban on two-stroke carbureted engines for all vessels, including PWC, after 2012. Alternative D assumes that no ban would take place and that two-stroke engines would be converted in accordance with the Environmental Protection Agency's assumptions (40 CFR Parts 89-91, "Air Pollution Control; Gasoline Spark-Ignition and Spark-Ignition Engines, Exemptions; Rule, 1996). Alternative C (the modified preferred alternative) is compared to alternative D because alternative D allows for a mix of older model-two stroke carbureted engines with the EPA compliant cleaner engine models (two stroke fuel injected and four stroke engines) through the life of the plan. A brief summary of the analysis of surface water quality impacts to Lakes Mead and Mohave found in the Final EIS for alternatives C and D are described below.

The approach to evaluating surface water quality impacts is found in appendix G of the Final EIS. Engine conversion, restriction by engine type, and the total boating capacity used to calculate impacts varies between alternatives C and D. Alternative C uses a combined total boating capacity of boats for both Lakes Mead and Mohave of 5,055 boats at one time, while alternative D uses a combined total boating capacity of 5,800 boats at one time. These boating capacities reflect the heaviest use period of the summer. The threshold volumes required to meet water quality standards at Lake Mead under alternative C are 48% less than alternative D in 2012. The threshold volumes required to meet water quality standards at Lake Mohave under alternative C are 61% less than alternative D in 2012 because of the combination of fewer boats on the water in alternative C and the ban on two-stroke carbureted engines after 2012. Complete results of the water quality analysis are found in the water quality section of the Environmental Consequences section of the Final EIS and in appendix H of the Final EIS.

Impacts of All Watercraft on Surface Water Quality
Threshold Volume of Water Needed to Meet Water Quality Standards
(in acre-feet)

	Ecological Benchmark					Arizona Standards for fish consumption	Human Health Criteria	
Alt./ Year	Benzo (a)pyrene (fuel and exhaust)	Naphthalene	1-methyl Naphthalene	Benzene	MTBE	Benzo (a)pyrene (fuel and exhaust)	Benzo (a)pyrene (fuel and exhaust)	Benzene
Lake Mead (assuming minimum pool elev. 1,150 feet, volume above thermocline 2,085,000 acre-feet)								
C-2004	4,047	1,602	4,554	1,836	58	28,331	12,878	198,900
D-2004	4,593	1,818	5,167	2,083	66	32,149	14,613	225,702
C-2012	1,754	694	1,973	795	25	12,275	5,580	86,179
D-2012	3,371	1,334	3,793	1,529	48	23,597	10,726	165,662
Lake Mohave (assuming minimum pool elev. 634 feet, volume above thermocline 687,800 acre-feet)								
C-2004	3,352	1,326	3,771	1,520	48	23,461	10,664	164,706
D-2004	3,925	1,553	4,416	1,780	56	27,473	12,488	192,874
C-2012	1,035	410	1,165	470	15	7,247	3,294	50,877
D-2012	2,652	1,049	2,983	1,203	38	18,561	8,437	130,307

18. One commenter stated, EPA has confirmed that studies show most unburned gasoline and gasoline additives emitted from two-stroke marine engines evaporate from water within the first hour and 15 minutes after they are released. More specifically, at 86 degrees Fahrenheit 84% of the unburned gasoline/additive mix released into the water evaporated within 75 minutes.

NPS Response: We generally agree with this comment. The commenter includes a quantitative discussion of the volatility of many of the components found in gasoline and gasoline additives emitted from carbureted two-stroke engines. As stated in the Final Environmental Impact Statement, many organic pollutants that are initially dissolved in the water volatilize to the atmosphere, especially if they have high vapor pressures, are lighter than water, and mixing occurs at the air/water interface (Final EIS, Methodology section, under Water Resources, Assumptions for Evaluating Impacts from Marine Engines, Including Personal Watercraft). Therefore, NPS analyses accounts for evaporative rates in its methodology and believes it has accurately portrayed potential effects to water quality.

19. There were a number of commenters concerned that the changeover to four-stroke and two-stroke direct injection PWC engines to meet the requirements of the EPA 2006 and CARB 2008 emission standards is occurring much more rapidly than EPA and National Park Service has estimated. Amounts of unburned fuel released at Lake Mead and Lake Mohave will accordingly continue to decline rapidly, achieving a reduction of approximately 90% from the 1998 baseline levels by 2012.

NPS Response: In the water quality analysis presented in the Final EIS, the assumption was made that clean technology engines (any engine not using carbureted two-stroke technology) would be 90% cleaner than the carbureted two-stroke engines. Under alternative C, conversion to all clean technology engines would be completed by

2012, while alternative D uses the rate of conversion of the engines from carbureted two-stroke to clean engines consistent with the EPA rule, “Final Rule for New Gasoline Spark-Ignition Marine Engines” (US EPA, 1996). The NPS used the EPA data where it was assumed that 21.6% of the carbureted two-stroke engines in use in 1998 would be replaced by 2004 and that 58.4% would be replaced by 2012. One of the commenter’s (Personal Watercraft Industry Association) assertion is principally based on confidential, proprietary PWC sales and forecast data prepared by PWC manufacturers. This proprietary data was not supplied with the comment, and therefore has not been available to the NPS.

The commenter states that the data indicates that the conversion of PWC models to cleaner engines is occurring more rapidly than anticipated in the 1996 EPA analysis of the effects of the conversion rule. While the National Park Service has no reason to doubt that PWC conversions and sales may be proceeding at a greater rate than forecast by EPA, there is no survey or similar data available at this time that indicates that the engine mix at Lake Mead is proceeding at a faster or slower rate than the EPA forecast. Therefore, use of the EPA rates is considered appropriate in disclosing potential impacts to water quality.

20. One commenter stated the National Park Service committed to investigate the extent of oil and gas spills at refueling operations in the Lake Mead NRA, and to mitigate the impacts from these activities. This will further reduce the amount of unburned fuel released into the waters of the Lake Mead NRA from PWC use. Expected reductions in PWC emission of unburned fuel and mitigation to limit spills from refueling operations will serve to alleviate any continuing concern regarding the possibility of surface oil sheen in areas of concentrated boating activity.

NPS Response: As stated in the Final EIS in the Environmental Consequences section, under Impacts of Alternatives A, B, C, and D, Water Resources, Impacts, the National Park Service provides best management practices for the handling of fueling areas and boat maintenance for concessioners and the boating public. The purpose of these practices is to reduce the pollutants entering the lakes due to fueling and boat maintenance activities. With the management requirements and public education reducing the levels of these impacts, the impacts would be expected to be minor. NPS has agreed to evaluate the operations of all fueling facilities on Lakes Mead and Mohave.

21. One commenter was concerned that the USGS sampling data showed the presence of the gasoline additive MTBE. The federal government, Nevada or Arizona have not established standards or maximum contaminant levels for MTBE. EPA has adopted an advisory level of 20 – 40 µg/l for drinking water. The highest sample measured by USGS was 4.16 µg/l, well below this EPA advisory level. The reduction in PWC engine emissions (as well as emissions from other marine engines) at Lake Mead since the sample was measured in 1999 is not likely to be repeated.

NPS Response: The water intake that delivers drinking water to the Las Vegas Valley is located at an elevation of 1,050 feet above mean sea level in Lake Mead, while the elevation of the lake surface is usually above 1,180 feet. This puts the intake at a depth of 130 feet or more. Gasoline compounds have not been detected in water samples regularly taken near the water intake by staff of the Southern Nevada Water System. In addition,

the testing at water intake facilities has shown that levels of these compounds do not exceed advisory standards

In the analysis presented in the Final EIS in Table 50, Toxicity Benchmarks, the ecological benchmark for MTBE, which is considered preliminary chronic water quality criteria, of 51,000 µg/l was used. The table found in response to Comment Number 17 shows a negligible impact from MTBE under the modified preferred alternative (alternative C) and the baseline (alternative D). We are aware California has mandated removal of MTBE from gasoline by next year, and the EPA is considering doing the same within the near future.

22. One commenter is concerned that recent studies show that PAH emissions might increase as carbureted two-stroke PWC engines are replaced by direct injection two-stroke models and that increased PAH emissions will have adverse impacts on aquatic organisms in the Lake Mead NRA. The Kado study measured only PAH air emissions from the test chamber while the outboard engine ran in a water tank. The study says nothing about what levels of PAHs were deposited in water. It therefore can provide no basis whatsoever for suggesting that the use of current and future direct injection two-stroke PWC engines present a risk to aquatic organisms or will impair water resources in the Lake Mead NRA.

NPS Response: PAHs were addressed in the draft and final EIS in the issues and impact topics and water quality section of Environmental Consequences. Text in the draft EIS impact analysis (alternatives B, C and D) was changed in the final EIS to read, "...changing from carbureted two-stroke engines to two-stroke fuel-injected engines may result in increases of airborne particulate-associated PAH. Further research, outside the scope of this planning effort, is needed to identify what impact this would have on PAH concentrations in water." However, the preferred alternative, which bans two-stroke carburated engines after 2012, would greatly reduce the impact of petroleum emissions on water quality. PWC would contribute 19% of total hydrocarbon pollution in Lake Mead in 2012. Given the volume of available water in Lake Mead for mixing these compounds, NPS concludes the impact to water quality and aquatic organisms is minor and would not result in impairment to park resources.

In addition, according to industry reports, it appears that the trend for conversion is toward the four-stroke model engines instead of direct injection two-stroke models. According to the PWIA, the two top selling PWC models for 2002 incorporated the four-stroke technology, which have shown to produce fewer PAH emissions. Also, in discussions with PWC retailers in the vicinity of Lake Mead, NPS has been informed that the majority of new PWC purchases have been four-stroke engines. If this trend in sales is realized and it continues, PAH emissions would be less than indicated in the analysis.

<u>Comments related to Air Quality</u>

23. One commenter stated the National Park Service analysis does not reflect the dramatic decrease in PWC hydrocarbon plus nitrogen oxides (HC+NOx) emissions projected to occur over the next ten years that strongly suggests that the National Park Service's proposed ban on the use of carbureted two-stroke models after 2012 is unnecessary.

NPS Response: As part of the Final Environmental Impact Statement (EIS) for the Lake Management Plan, the National Park Service prepared a quantitative analysis of air quality impacts for each of the proposed alternatives. The Final EIS analysis addressed emissions of all watercraft, including PWC, on Lakes Mead and Mohave. Four alternatives were analyzed. Alternative A would continue the prohibition of PWC in the Lake Mead NRA. Alternative B would prohibit all carbureted two-stroke engines beginning in 2004. Alternative C assumes a ban on two-stroke carbureted engines for all vessels, including PWC, after 2012. Alternative D assumes that no ban would take place and that two-stroke engines would be converted in accordance with the Environmental Protection Agency's assumptions (40 CFR Parts 89-91, "Air Pollution Control; Gasoline Spark-Ignition and Spark-Ignition Engines, Exemptions; Rule, 1996). The Final EIS emission projections for HC and NOx for alternatives C and D are shown in the table below. Emission forecasts for other pollutants and for alternatives A and B are included in the Final EIS.

Estimated Hydrocarbon and Nitrogen Oxides Emissions for Alternatives C and D (tons per year)

	Alternative C[1]				Alternative D[2]				Difference[3]	
	2004		2012		2004		2012		2012	
Percent of carbureted two-stroke engines replaced	21.6%		100%		21.6%		58.4%			
	All Water Craft	PWC	All water craft	PWC	All water craft	PWC	All water craft	PWC	All water craft	PWC
Pollutant										
Hydrocarbons (HC)	904	689	360	199	918	701	659	467	299	268
Nitrogen oxides (NOx)	159	16	186	40	161	16	174	28	-12	-12
HC+Nox	1063	705	546	239	1079	717	833	495	287	256

[1]Alternative C (modified preferred alternative): After 2012, all boats on the lakes would be compliant with the EPA 2006 emission standards.

[2]Alternative D (baseline alternative): By 2012, 58.4% of carbureted two-stroke engines on the lakes would be compliant with the EPA 2006 emission standards. Using EPA's assumptions, by 2025, 75% of engines on the lakes would be compliant with the EPA emission standards.

[3t]Difference between alternative Cand alternative D in 2012. Negative values indicate an increase in NOx emissions.

Note that in 2004 the conversion of carbureted two-stroke engines to cleaner engines is assumed to be the same for both alternatives C and D, but the emissions for alternative D would be higher than for alternative C. This would occur because alternative D would allow more watercraft to be in operation, compared to alternative C. The important result shown in the above table is that in 2012, alternative C would result in 287 fewer tons per year of HC+NOx than alternative D. Alternative C proposed elimination of these annual emissions through the life of the plan (2003 through 2023) would be a significant contribution to the efforts to reduce ozone concentrations in the region. This is because even though the cleaner four-stroke and two-stroke direct injected engines will emit more Nox due to a higher ratio of fuel actually being burned, they emit less hydrocarbons which reduces the likelihood of ozone formation.

Emission levels shown in the table above are not directly comparable with the emission levels submitted by the commenter because the National Park Service –Air

Quality Division calculates emissions on an annual basis, and the commenter's calculations are for an average boating day during the boating season. Some assumptions made for National Park Service calculations are more conservative than those used for commenter's calculations. The National Park Service assumed that the conversions from carbureted two-stroke engines to cleaner engines would occur at the rate forecast by the Environmental Protection Agency. As shown in the table above for tons per year of estimated hydrocarbon and nitrogen oxides emissions for alternatives C and D, 21.6% conversion is assumed from 1998 levels by 2004, and 58.4% conversion by 2012 - The commenter assumes a faster conversion. The commenter assumes that emissions would be reduced because a significant portion of PWC would be cleaner than EPA requirements due to compliance with the more restrictive California requirements. However, our goals for the reduction of emissions can not be achieved without the proposed 2012 restrictions.

24. One commenter expressed concern that PWC emissions are declining faster than forecast by the EPA. The existing fleet of PWC has achieved a 25% reduction in the pre-1999 baseline of HC+NOx emissions, and will achieve over an 80% reduction by 2012.

NPS Response: The comment is principally based on two assumptions made by the commenter. The first is based on confidential, proprietary PWC sales and forecast data prepared by PWC manufacturers. No supporting data was supplied with the comment. The commenter states that the data indicates that the conversion of PWC models to cleaner engines is occurring more rapidly than anticipated in the 1996 EPA analysis of the effects of the conversion rule. While the National Park Service has no reason to doubt that PWC conversions and sales may be proceeding at a greater rate than forecast by EPA, there is no survey or similar data available at this time indicating the engine conversion at Lake Mead is proceeding at a faster or slower rate than the EPA forecast. Therefore, use of the EPA rates is considered appropriate – and use of an accelerated rate may be considered speculative without additional supporting data.

The second assumption by the commenter is that 75% of the PWC at Lake Mead will have engines that comply with the California (CARB) conversion rule for all years, which requires that marine engine emission reductions targeted by the EPA for 2006 be achieved in California by 2001. The California rule then requires further emission reductions by 2004 and 2008 (Title 13, California Code of Regulations, sections 2440-2448). The commenter assumes that 50% of the PWC users at Lake Mead will be from California and all will have CARB-compliant watercraft, and that, because of manufacturing and sales efficiencies outside of California, an additional 25% of the Lake Mead PWC users will have CARB-compliant watercraft. The National Park Service concurs that many watercraft users at Lake Mead have California-registered PWC, and that they will meet the California Air Resources Board standards.

There is no data relative to PWC at Lake Mead to confirm the 75% figure assumed by the commenter. The National Park Service emissions calculations are conservative only in the sense that it does not specifically account for watercraft that have already or will be converted to meet California Air Resources Board standards. This is not considered "overly" conservative because 50% of the park visitors originate from California, and a certain percentage of these visitors will have PWC that are compliant with the EPA 2006

rule. There is currently no data to support or refute this 75% estimate. Under the preferred alternative, the engines would be 100 % compliance after 2012.

25. One commenter stated that PWC emissions of HC+NOx at Lake Mead during the boating season were 3.9 tons per day prior to 1999, and are estimated at 2.9 tons per day for 2002 and 0.7 tons per day in 2012. Clark County, Nevada emissions are estimated at 450 tons per day. Therefore, PWC emissions at Lake Mead pose no public health risks.

NPS Response: The NPS-estimated emissions are a small fraction of Clark County emissions. The NPS-estimated emissions are on the same order of magnitude as those presented by the commenter, even though the NPS estimates a larger amount of emissions. The argument that a single source has negligible impact because of its small size compared to all the sources in the region is not valid. This point was effectively stated in *Kings County Farm Bureau v. City of Hanford,* a 1990 California case that has been widely publicized and used in subsequent environmental analyses. The *Kings County* case also addressed the impacts of ozone-forming pollutants, and emphasized that each source is important when considering cumulative impacts.

Clark County is currently in attainment of the federal 1-hour ozone standard. The EPA has not yet made attainment designations for the 8-hour ozone standard that was promulgated in 1997 but was delayed by litigation in implementation. Preliminary data indicates that Clark County might not attain the 8-hour ozone standard (www.epa.gov/ttn/naaqa/ozone/areas/maps/nv8hr.gif). Therefore, reduction of emissions from all sources in the county is an issue.

As shown in the previous responses, the proposed elimination of two-stroke carbureted engines from Lake Mead NRA after 2012 would result in a substantial reduction in emissions, and would contribute to the improvement of air quality in Clark County.

26. National Park Service notes that recent studies suggest changing from two-stroke carbureted to two stroke direct injection PWC engines might increase PAH emissions. A study by Norman Y. Kado et al, *Airborne Particle Emissions from 2- and 4-stroke Outboard Marine Engines: Polycyclic Aromatic Hydrocarbon and Bioassay Analysis*, (Kado study) quantified PAH concentrations in airborne particulate emissions. The Kado study showed that the PAH emissions from the direct-injected two-stroke engines tested were greater than from carbureted two-stroke engines. The direct-injected two-stroke outboard engine used in that study was a 1999 model and represented very early technology, and the results of the study are not applicable to newer model direct-injection outboard engines, much less PWC engines.

NPS Response: The commenter rejects the applicability of the Kado study to newer engines including PWC engines. However, since no comparable data for newer engines was presented, and many older engines would be allowed to operate at the recreation area through 2012, the Kado study is relevant. NPS acknowledges in the final EIS that further research is needed to identify what effect the conversion of two stroke carburated engines to two stroke fuel injected engines would have on PAH concentrations in water.

In speaking with local PWC businesses the NPS was informed that the majority of newer PWC models being sold are four-stroke engines, not two-stroke fuel injected engines, but no specific data is available. These comments concerning four-stroke sales

are consistent with statements made by PWIA that nationally the two top-selling PWC models are four-stroke modes. Nevertheless, while conversion of some carbureted two-stroke engines to direct-injected two-stroke engines would result in increased PAH emissions, the concurrent conversion to four-stroke engines would result in reduced PAH emissions. As shown by the commenter, using Kado data, the combined PAH emissions of one direct-injected two-stroke engine and one four-stroke engine would be slightly less than the PAH emissions of the two carbureted two-stroke engines that would be replaced. Therefore, the increase or decrease of PAH emissions as carbureted two-stroke engines are converted to cleaner engine types would depend on the relative numbers of the types of cleaner engines. The speculation of the mix of engine types would not appreciably change NPS conclusions made in the final EIS.

27. Continued PWC use on Lake Mead under the proposed rule will not pose any adverse health risks for park visitors under even the "worst case" airborne PAH concentrations that could theoretically be generated by the vessels.

NPS Response: A relevant study concluded that there are some health effects associated with PAH emissions. (See *Environmental and Occupational Exposure to Toxic Air Pollutants from Winter Snowmobile Use in Yellowstone National Park* (Kado, Kuzmicky, and Okamoto)). Therefore the NPS cannot support a conclusion as the commenter suggests, that PWC use at Lake Mead would pose no adverse health risks from toxic air pollutant emissions; however the final EIS does acknowledge that the impact would likely be minor.

<u>Comments related to Wildlife and Wildlife Habitat</u>

28. One commenter questions the occurrence of the Southwestern willow flycatcher at the inflow areas of the Muddy and Virgin Rivers and stated that no Southwestern willow flycatchers nest within Lake Mead NRA.

NPS Response: Southwestern willow flycatchers have been recorded within Lake Mead NRA, and are known to nest in certain areas. Monitoring has been conducted by the San Bernardino County Museum, the Bureau of Reclamation, and the National Park Service. The most recent published report (McKernan and Braden 2002) for the 2001 field season found flycatchers at the Virgin River-Lake Mead delta. In addition, since 1997, flycatchers have been observed breeding along the lower Muddy River on the Overton Wildlife Management Area, within Lake Mead NRA. There have also been flycatchers observed in the lower Grand Canyon, adjacent to the recreation area, in suitable habitat at Lake Mohave.

As stated in the draft and final EIS under the "Affected Environment" section, much of the shoreline areas of Lakes Mead and Mohave have riparian stands that are comprised of non-native tamarisk, or are too young to provide suitable nesting habitat. However, several areas have been determined suitable, and nest sites have been located. Of particular importance are the sensitive inflow areas, which will be protected by zoning for primitive and semi-primitive settings. In addition, if surveys find nesting pairs elsewhere along Lakes Mead and Mohave, closing the area under temporal zoning could be implemented to protect these sites.

29. One commenter takes issue with the impact discussion on shorebirds and other wildlife. They state, “on the basis of anecdotal evidence (chiefly testimony from park staff) the proposed rule concludes that PWCs could disturb wildlife through the interruption of normal activities, alarm or flight, avoidance and displacement of habitat, and nest abandonment. The term “could” demonstrates that National Park Service has not obtained evidence that such disturbance actually occurs at Lake Mead NRA.”

NPS Response: There are many studies that relate to the impacts of motorized vessels, including PWC, on shorebirds, bald eagles, and other wildlife. These studies were considered in the development of the draft and final EIS. *Buffer zones to protect foraging and loafing waterbirds from disturbance by personal watercraft in Florida* (Rodgers 2000) determined that a buffer zones for motorized vessels would protect waterbirds. *Effects of Motorboats and Personal Watercraft on Flight Behavior over a Colony of Common Terns* (Burger 1998) showed disturbance responses from the use of motorized vessels, and recommended speed and distance restrictions close to tern colonies. *Effects of Recreational Activities on Wintering Bald Eagles* (Stalmaster and Kaiser 1998) showed that high recreational use, including foot traffic and motorized vessels, can disrupt feeding activities.

In addition, National Park Service biologists provided information related to disturbance from motorized vessels to birds and other wildlife, and information pertaining to the sensitive shoreline areas around Lakes Mead and Mohave. This information was used in the draft and final EIS for developing mitigation and monitoring activities, and in establishing protective measures for wildlife within the recreation area. These measures, including establishing primitive and semi-primitive zones in the selected shoreline areas, will protect sensitive bird species from disturbance associated with the use of motorized vessels, including noise that flushes the birds, and wakes that disrupt nests.

30. There was concern expressed about the occurrence of the Yuma clapper rail. One commenter references the draft rule where it states that while the inflow areas of the Muddy and Virgin Rivers contain habitat that might support the endangered Yuma clapper rail, no confirmed sightings have occurred within the recreation area. The EIS concurs with this statement. However, on page 56788, the proposed rule contradicts itself, and states incorrectly that the Yuma clapper rail resides at Lake Mead NRA.

Clearly, the Yuma clapper rail cannot be said to “occupy” the shoreline or habitat of Lake Mead NRA if no one has ever seen it at the lake. This mistake should be corrected in the final rule.

NPS Response: Suitable habitat for the Yuma clapper rail does occur within the recreation area, in particular, in the inflow areas of the Muddy and Virgin Rivers. The commenter is correct that no Yuma clapper rail have been recorded within the recreation area. They have been recorded nearby in the Virgin River area. This has been corrected in the final rule.

31. There was one comment on the razorback sucker. The commenter points out the proposed rule states that biologists have studied the effect of motorized vessels on razorback sucker spawning areas at Lake Mead NRA for 10 years, and have concluded that such vessels, when passing through these areas interrupt spawning and generally

interfere with the reproductive process. Nor do they include the studies or their data as appendices. As a result, the public and other scientists have no ability to determine whether the conclusions drawn by the "biologists" are valid. This is poor science. In addition, it appears that the proposed rule may be overstating the effects of PWCs and other vessels on the spawning habitats of the razorback sucker, given that the fish spawn between January and April, when few people visit Lake Mead NRA.

NPS Response: Fish species have been shown to be negatively affected by motorized watercraft emissions (Oris, et al 1998). As stated in the draft and final EIS, temporary disturbance to spawning razorback suckers from the use of motorized vessels has been observed by biologists conducting fish monitoring activities (Marsh 2001). Visitation is currently low during spawning, and is likely to remain low between January and April, when the fish are spawning. Therefore, the impact from the continued use of motorized vessels is considered not likely to adversely affect the razorback sucker, and is not likely to jeopardize the continued existence of this species. In addition, under the mitigation outlined in the *U.S. Fish and Wildlife Service Biological Opinion* and in the draft and final EIS, biologists from Lake Mead NRA will continue to work with the Native Fish Work Group to monitor fish species and visitation to determine if temporal zoning of spawning areas is necessary to further protect razorback suckers and their habitat. The Native Fish Workgroup is composed of representative of Federal and State agencies as well as scientists with the respective state universities.

32. One commenter noted the proposed rule claims that use of motorized vessels, including PWCs "likely" disturbs bonytail chubs attempting to spawn in Lake Mead NRA. Again, no technical studies have been conducted to support these hypotheses.

NPS Response: According to the *U.S. Fish and Wildlife Service Biological Opinion*, appendix G of the final EIS, the largest remaining populations of bonytail chub in the wild are in Lake Mohave and in Lake Havasu. Both populations are the result of stocking young fish born from the existing broodstock into the declining wild populations. Efforts are underway by the U.S. Fish and Wildlife Service and the Bureau of Reclamation to refine rearing techniques and develop additional rearing facilities to increase production.

While it is true that no technical studies have been conducted to study the impacts of recreational use on the bonytail chub, as stated in the draft and final EIS, scientists who have studied native fish in the recreation area in the past ten years have observed that motorized use around spawning areas of razorback suckers can temporarily disrupt spawning activities, and the same is likely true for bonytail chub (Marsh 2001). Since bonytail chub are known to spawn in April and May, it can be hypothesized that some disturbance impacts from recreational use could temporarily affect the bonytail chub spawning activities. In addition, bony tail chub are known to spawn in the southern portion of Lake Mohave, just north of Katherine Landing. This area receives increased use starting in May, when spawning activities are known to occur.

Fish species have also been shown to be negatively affected by motorized watercraft emissions (Oris, et al 1998). Reduced water quality could harm aquatic organisms through algae blooms, suspended solids and turbidity, and oxygen depletion. However, Lake Mohave holds an immense amount of water, with a large volume of water flowing through the system. Therefore, even though there are contaminants entering the system from motorized vessels and from other sources such as fuel spills and parking lot runoff,

these contaminants have not been recorded at concentrations that are known to result in impairment to the aquatic system or to human health.

The National Park Service is required by law and policy to survey for, protect, and strive to recover all species native to the national park system units that are listed under the Endangered Species Act (Management Polices 2001). The policy further states that the National Park Service will undertake active management programs to inventory, monitor, restore, and maintain listed species' habitats, including controlling detrimental visitor access, and enhancing critical habitat. The National Park Service and the U.S. Fish and Wildlife Service have determined that the temporal zoning which could be imposed around spawning habitat would protect these species, and could enhance critical habitat. As stated in the Biological Opinion, the use of temporal zoning will not be imposed until recommended by Federal biologists working in consultation with the Native Fish Workgroup.

Comments related to Soundscape

33. One commenter suggested the National Park Service should insist that all watercraft have the quieter four-stroke engines.

NPS Response: The final rule would phase out the carbureted two-stroke engines over a ten-year period. The rule would only allow the use of direct injection two-stroke engines and four-stroke engines. Direct inject two-stroke and four-stroke engines have been shown to be quieter than the carbureted two-stroke engines. The NPS does not believe it is necessary to require only four-stroke engines.

34. We received a number of comments citing a variety of concerns over the noise associated with PWC use. In almost all cases this noise was characterized as "annoying". Specific concerns included the constant and repeated fluctuation in engine tone and pitch as PWCs enter and exit the water while jumping wakes, changing speed and performing other quick maneuvers along with the persistent noise associated with remaining in one general location rather than traveling from point-to-point.

NPS Response: National Park Service *Management Policies* for Soundscapes, as stated in *Management Policies 2001* (4.9), require superintendents to "identify what levels of human-caused sound can be accepted within the management purposes of parks. The sound considered acceptable will vary throughout the park, being generally greater in developed areas and generally lesser in undeveloped areas. . . The service will take action to prevent or minimize all noise that . . . exceeds levels that have been identified as being acceptable to, or appropriate for, visitor uses at the sites being monitored." *Management Policies* for Visitor Use (8.2) indicate that unless mandated by statute, the National Park Service will not allow visitors to conduct activities that would unreasonably interfere with the atmosphere of peace and tranquility, or the natural soundscape maintained in wilderness and natural, historic, or commemorative locations within the park.

As written in the enabling legislation, the management purpose of Lake Mead is to provide public recreation, benefit, and use in a manner that will preserve, develop, and enhance, so far as practicable, the recreation potential and preserve the scenic, historic, scientific, and important features of the area. Recreational uses specifically listed in the act include bathing, boating, camping, and picnicking. Various levels of sound are

associated with some of those uses, such as boating and PWC, and are consistent with the park's purpose as defined by the legislation.

To provide a “peaceful and tranquil” experience in some locations, PWC use would be prohibited within the primitive and semiprimitive recreational opportunity zones. These zones also place restrictions on wake speed and identify acceptable motor types, such as electric trolling motors in primitive zones. These prohibitions or restrictions in alternatives B and C (the preferred alternative) of the draft and final EIS and the modified preferred alternative of the final EIS would provide for a peaceful and tranquil visitor experience. In areas such as Black Canyon, where a diverse range of visitors use a variety of nonmotorized and motorized watercraft, the National Park Service would temporally zone this unique area to accommodate all users and provide experiences that range from tranquil to more rural and mechanized. All alternatives include plans and policies for enforcement of noise regulations. These elements of the Environmental Impact Statement are consistent with NPS *Management Policies*.

35. One commenter stated, testing at the Glen Canyon National Recreation Area indicate that the maximum noise levels for PWC are lower than the maximum noise levels for other motorized vessels.

NPS Response: It is more appropriate to say that maximum noise levels for PWC were found to be similar to outboards and inboards of similar size and power. The Glen Canyon test data show that, except boats with V-8 engines (V-8 “muscle boats”), which were clearly louder than all other craft, at a given speed, the noise levels of PWC were sometimes greater and sometimes less than those of other watercraft.

36. One commenter stated, since 1998, PWC engine sound levels have been reduced by up to 70%.

NPS Response: NPS has acknowledged that the newer model PWC are quieter than the older models. One might interpret a reduction from 100 to 30 decibels (dBA) as a 70% reduction. A noise level reduction of 5.2 dBA results from a 70% reduction in noise sources, for example if one had 10 like machines running, and turned off 7 of them. It is commonly accepted that people perceive a 10 dBA reduction in noise as about half (50%) as loud, such that a 70% reduction by perception would be something greater than 10 dBA. However the NPS can not state the exact percentage of sound emissions between the various models.

37. The commenter notes opponents of PWC have claimed that the vessels emit noises as high as 102 decibels, without specifying distances or the method of sound measurement. These unsubstantiated claims are refuted by the National Park Service’ recent testing at Glen Canyon, and cannot be reproduced under accepted sound measurement standards.

NPS Response: As noted in the comment, no distance was specified for the 102-decibel (dBA) measurement. A noise source of 76 dBA at 82 feet, which was measured for a PWC, would be 102 dBA at 4 feet. Other conditions that could contribute to PWC noise of 102 dBA at distances greater than 4 feet would be PWC operation without a muffler or with a faulty muffler, and if the noise was measured when the PWC was

airborne. This response is not to imply that 102 dBA is a typical PWC noise, but to indicate that while a data point of 102 dBA without description is of little value.

38. One commenter stated, "The National Marine Manufacturers Association has published a Model Noise Act for use by state legislatures or other agencies with jurisdiction over the manufacture and operation of watercraft. The Model Noise Act promotes regulation or legislation that would prohibit the operation of watercraft in a manner to exceed 75 dBA at the shoreline. The model noise act would also promote regulation or legislation that would prohibit the manufacture of watercraft that could not operate in compliance with the 75 dBA standard."

NPS Response: The 75 dBA shoreline noise level limit is consistent with a relatively recent state of Nevada standard that will be enforced at Lake Mead (Nevada Administrative Code Section 488.460). The National Park Service currently revising boating regulations and is proposing to adopt the 75 dBA standard and will encourage the state of Arizona to adopt a similar standard.

Drafting Information

The principal authors of this final rule are: Jim Holland, Management Assistant, Lake Mead NRA; Kevin Hendricks, Assistant Chief Ranger, Lake Mead NRA; Nancy Hendricks, Resource Management Specialist, Lake Mead NRA; Kym Hall, Regulations Program Manager, National Park Service; and Michael Tiernan, Office of the Solicitor, Department of the Interior.

COMPLIANCE WITH OTHER LAWS

Regulatory Planning and Review (Executive Order 12866).

This document is a significant rule and has been reviewed by the Office of Management and Budget under Executive Order 12866.

(1) This rule will not have an effect of $100 million or more on the economy. It will not adversely affect in a material way the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities. This determination is based upon the findings in a report prepared by the National Park Service entitled "Economic Analysis of Personal Watercraft Regulations in Lake Mead National Recreation Area" (Law Engineering and Environmental Services, Inc., March 2002). The focus of this study was to document the impact of this rule on a variety of small entities including PWC dealerships and repair shops, PWC rental business, and other local businesses that provide services to PWC users.

(2) This rule will not create a serious inconsistency or otherwise interfere with an action taken or planned by another agency. Actions taken under this rule will not interfere with other agencies or local government plans, policies, or controls. This is an agency specific rule.

(3) This rule does not alter the budgetary effects of entitlements, grants, user fees, or loan programs or the rights or obligations of their recipients. This rule will have no effects on entitlements, grants, user fees, or loan programs or the rights or obligations of their recipients. No grants or other forms of monetary supplements are involved.

(4) This rule raises novel legal or policy issues. This rule is among the first of its kind for managing PWC use in National Park Units and the first for managing use in a National Recreation Area. The National Park Service published general regulations (36 CFR 3.24) in March 2000, requiring individual park areas to adopt special regulations to authorize PWC use. The implementation of the requirements of the general regulation continues to generate interest and discussion from the public concerning the overall effect of authorizing PWC use and National Park Service policy and park management.

Regulatory Flexibility Act

The Department of the Interior certifies that this document will not have a significant economic effect on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.). Benefits

Alternative A, the no action alternative, represents the baseline conditions of this rulemaking. Under that alternative, all PWC use would be prohibited from the park. Alternatives B and C would permit PWC use with certain restrictions, and Alternative D would permit PWC use as currently managed in the park. The benefits of any alternative are measured relative to the baseline conditions, which are represented by Alternative A. Therefore, there are no incremental benefits associated with Alternative A. The primary beneficiaries of Alternatives B, C, and D would be the park visitors who use PWCs and the business that provide services to PWC users such as rental shops, restaurants, gas stations, and hotels. Additional beneficiaries include individuals who use PWCs outside the park where PWC users displaced from the park may decide to ride if PWC use within the park were prohibited. Benefits accruing to individual PWC users are called consumer surplus gains, and those accruing to businesses are called producer surplus gains. Consumer surplus measures the net economic benefit obtained by individuals from participating in their chosen activities, while producer surplus measures the net economic benefit obtained by businesses from providing services to individuals. These benefits, projected over a ten-year horizon, are summarized in the table below.

Present Value of Projected Incremental Benefits Under Alternatives B, C, and D, 2002 – 2012

	PWC Users	Businesses	Total
Alternative B			
Discounted at 3%	$74,112,030	$2,031,990 - $11,232,060	$76,144,020 - $85,344,090
Discounted at 7%	$59,006,910	$1,617,850 - $8,942,800	$60,624,760 - $67,949,710
Alternative C			
Discounted at 3%	$100,580,610	$2,477,690 - $12,863,370	$103,058,300 - $113,443,980
Discounted at 7%	$80,080,800	$1,972,710 - $10,241,630	$82,053,510 - $90,322,430
Alternative D			
Discounted at 3%	$105,874,320	$2,597,680 - $13,426,400	$108,472,000 - $119,300,720
Discounted at 7%	$84,295,580	$2,068,240 - $10,689,900	$86,363,820 - $94,985,480

Costs

As with the benefits described above, the costs of any alternative are measured relative to the baseline conditions, which are represented by Alternative A. Therefore, there are no incremental costs associated with Alternative A. The primary group that would incur costs under Alternatives B, C, and D are the park visitors who do not use

PWCs and whose park experiences would be negatively affected by PWC use within the park. At Lake Mead, non-PWC uses include boating, canoeing, fishing, and hiking. Additionally, the public could incur costs associated with impacts from Alternatives B, C, and D to aesthetics, ecosystem protection, human health and safety, congestion, and non-use values. However, these costs could not be quantified for all alternatives due to a lack of available data.

There are other costs associated with Alternatives B, C, and D relating to NPS enforcement of PWC restrictions. Those costs, projected over a ten-year horizon, are summarized in the table below.

Present Value of Project NPS Enforcement Costs Under Alternatives B, C, and D, 2001-2012

Alternative B	
Discounted at 3%	$3,523,950
Discounted at 7%	$2,793,080
Alternative C	
Discounted at 3%	$4,195,180
Discounted at 7%	$3,325,090
Alternative D	
Discounted at 3%	$5,202,030
Discounted at 7%	$4,123,110

Quantified Net Benefits

The quantified net benefits associated with Alternatives B, C, and D are presented in the table below. These net benefits do not account for the costs to non-PWC users, or those relating to aesthetics, ecosystem protection, human health and safety, congestion, or non-use values due to a lack of available data. Therefore, these net benefit estimates do not represent all costs. If all costs could be incorporated, the indicated net benefits for each alternative would be lower. Nevertheless, these estimates present a likely range of net benefits that can be estimated from available information.

Present Value of Quantified Net Benefits Under Alternatives B, C, and D, 2002 – 2012

Alternative B	
Discounted at 3%	$72,620,070 - $81,820,140
Discounted at 7%	$57,831,680 - $65,156,630
Alternative C	
Discounted at 3%	$98,863,120 - $109,248,800
Discounted at 7%	$78,728,420 - $86,997,340
Alternative D	
Discounted at 3%	$103,269,970 - $114,098,690
Discounted at 7%	$82,240,710 - $90,862,370

Discussion

From an economic perspective, the selection of Alternative C as the preferred alternative was considered reasonable because certain costs could not be quantified in the net benefits presented above. Those costs, relating to non-PWC use, aesthetics, ecosystem protection, human health and safety, congestion, or non-use values, would

likely be greater for Alternative D than for Alternative C. Given that the quantified net benefits of Alternatives C and D are already similar (see the above table), further inclusion of these un-quantified costs could reasonably result in Alternative C having the greatest level of net benefits. Therefore, based on these factors, Alternative C was considered to provide the greatest level of net benefits.

Small Business Regulatory Enforcement Fairness Act (SBREFA).

This rule is not a major rule under 5 U.S.C. 804(2), the Small Business Regulatory Enforcement Fairness Act. The National Park Service has completed an economic analysis to make this determination. This rule:

a. Does not have an annual effect on the economy of $100 million or more.
b. Will not cause a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions.
c. Does not have a significant adverse effect on competition, employment, investment, productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises.

Unfunded Mandates Reform Act.

This rule does not impose an unfunded mandate on State, local, or tribal governments or the private sector of more than $100 million per year. The rule does not have a significant or unique effect on State, local or tribal governments or the private sector. This rule is an agency specific rule and imposes no other requirements on other agencies, governments, or the private sector.

Takings (Executive Order 12630).

In accordance with Executive Order 12630, the rule does not have significant takings implications. A taking implication assessment is not required. No taking of personal property will occur as a result of this rule.

Federalism (Executive Order 13132).

In accordance with Executive Order 13132, the rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment. This proposed rule only affects use of NPS administered lands and waters. It has no outside effects on other areas by allowing PWC use in specific areas of the park.

Civil Justice Reform (Executive Order 12988)

In accordance with Executive Order 12988, the Office of the Solicitor has determined that this rule does not unduly burden the judicial system and meets the requirements of sections 3(a) and 3(b)(2) of the Order.

Paperwork Reduction Act.

This regulation does not require an information collection from 10 or more parties and a submission under the Paperwork Reduction Act is not required. An OMB form 83-I is not required.

National Environmental Policy Act.

The National Park Service has analyzed this rule in accordance with the criteria of the National Environmental Policy Act and has prepared a draft Environmental Impact Statement (EIS). The draft EIS was made available for public review and comment on April 24, 2002 and the final EIS was made available for public review on January 10, 2003. A copy of the LMP/FinalEIS is available on the Lake Mead NRA web page (http://www.nps.gov/lame/planning), at regional libraries or a copy may be obtained by contacting the Superintendent, Lake Mead NRA.

Government-to-Government Relationship with Tribes

In accordance with the President's memorandum of April 29, 1994, "Government to Government Relations with Native American Tribal Governments" (59 FR 22951) and 512 DM 2: We have evaluated potential effects on federally recognized Indian tribes and have determined that there are no potential effects.

Administrative Procedures Act

This final rule will be effective upon publication in the Federal Register. In accordance with the Administrative Procedures Act, specifically, 5 U.S.C. 553 (d)(1), this rule (36 C.F.R. 7.48 (g)) is exempt from the requirement of publication of a substantive rule not less than 30-days before its effective date.

As discussed in the preamble of this rule, the final rule is a Part 7 special regulation for Lake Mead National Recreation Area that relieves the restrictions imposed by the general regulation, 36 CFR 3.24. The general regulation, 36 CFR 3.24, prohibits the use of personal watercraft in units of the national park system unless an individual park area has designated the use of personal watercraft by adopting a Part 7 special regulation. The proposed rule was published in the Federal Register (67 FR 56,785) on September 5, 2002, with a 60-day period for notice and comment consistent with the requirements of 5 U.S.C. 553 (b). The Administrative Procedures Act, pursuant to the exception in (d)(1), waives the section 553 (d) 30-day waiting period when the published rule "grants or recognizes an exemption or relieves a restriction." In this rule the NPS is authorizing the use of PWCs, which is otherwise prohibited by 36 C.F.R. 3.24. As a result, the 30-day waiting period does not apply to the Lake Mead National Recreation Area final rule.

The Attorney General's Manual on the Administrative Procedures Act, explained that the "reason for this exception would appear to be that the persons affected by such rules are benefited by them and therefore need no time to conform their conduct so as to avoid the legal consequences of violation. The fact that an interested person may object to such issuance, amendment, or repeal of a rule does not change the character of the rule as being one 'granting or recognizing exemption or relieving restriction', there by exempting it from the thirty-day requirement." This rule is within the scope of the exception as described by the Attorney General's Manual and the 30-day waiting period should be waived. See also, Independent U.S. Tanker Owners Committee v. Skinner, 884 F.2d 587(D.C.Cir. 1989). In this case, the court found that (d)(1) is a statutory exception that applies automatically for substantive rules that relieves a restriction and does not require any justification to be made by the agency. "In sum, the good cause exception must be invoked and justified; the (d)(1) exception applies automatically." at 591. The

facts are that Lake Mead National Recreation Area is promulgating this special regulation for the purpose of relieving the restriction, prohibition of PWC use, imposed by 36 CFR 3.24 and therefore, the (d)(1) exception applies to this rule.

In accordance with the Administrative Procedures Act, this rule is also excepted from the 30-day waiting period by 5 U.S.C. 553 (d)(3) and is effective upon publication in the Federal Register. As discussed above, the purpose of this rule is to comply with 36 C.F.R. 3.24 requirement for authorizing PWC use in park areas by promulgating a special regulation. "The legislative history of the APA reveals that the purpose for deferring the effectiveness of a rule under section 553(d) was 'to afford persons affected a reasonable time to prepare for the effective date of a rule or rules or to take other action which the issuance may prompt.' S.Rep. No. 752, 79th Cong., 1st Sess.15 (1946); H.R. Rep. No. 1980, 79th Cong., 2d Sess. 25 (1946)." United States v. Gavrilovic, 551 F.2d 1099, 1104 (8th Cir. 1977). The persons affected by this rule are PWC users and delaying the implementation of this rule for 30-days will not benefit them; but instead will be counterproductive by denying them, for an additional 30-days, the benefits of the rule.

The rule has been developed in full compliance with section 553(b) and (c) rulemaking requirements. The proposed rule was published in the Federal Register and provided 60 days for public comments. The public comments received are summarized and analyzed in this rule. Also as part of this process, the park prepared an environmental impact statement (EIS) that was made available to the public on April 24, 2002, for public review and comment. The EIS evaluated the various alternatives for managing PWC use at Lake Mead, including an alternative with no PWC use. This rule will now implement the preferred alternative identified in the EIS with some changes as a result of the public comments received on both the proposed rule and the draft EIS.

"In determining whether to invoke the exception, the agency is 'required to balance the necessity for immediate implementation against principles of fundamental fairness which require that all affected persons be afforded a reasonable time to prepare for the effective date of its ruling." The Northern Arapahoe Tribe v. Hodel, 808 F.2d 741, 752 (10th Cir. 1987). Since the primary purpose of the 30-day waiting period is so the public can prepare for the changes caused by the new rule. This rule authorizes the continued use of PWCs at Lake Mead National Recreation Area and will not require any changes that will require a 30-day waiting period for the public to prepare itself. Because of the ongoing grace period, PWC use has been allowed to continue at Lake Mead despite the prohibition in 36 CFR 3.24. The intent of the grace period was to provide time for parks, such as Lake Mead National Recreation Area, to promulgate special regulations without having the prohibition of 36 CFR 3.24 take effect and, for other parks that decided not to promulgate special regulations authorizing PWC use such as Cape Cod National Seashore and Delaware Water Gap National Recreational Area, to give people additional time to adjust their recreational use patterns, i.e., find alternative places to use their PWCs. There is no need to utilize the 30-day waiting period for the benefit of the affected parties, instead there is good cause for making this rule effective upon publication so that affected parties can continue using PWCs.

List of Subjects in 36 CFR Part 7

District of Columbia, National parks, Reporting and Recordkeeping requirements

In consideration of the foregoing, the National Park Service amends 36 CFR Part 7 as follows:

PART 7—SPECIAL REGULATIONS, AREAS OF THE NATIONAL PARK SYSTEM

1. The authority citation for Part 7 continues to read as follows:

Authority: 16 U.S.C. 1, 3, 9a, 460(q), 462(k); Sec. 7.96 also issued under D.C. Code 8-137(1981) and D.C. Code 40-721 (1981).

2. Section 7.48 is amended by adding paragraph (g) to read as follows:

§ 7.48 Lake Mead National Recreation Area

* * * * *

(g) Personal Watercraft (1) A person may launch and operate a personal watercraft in park waters or beach a personal watercraft on park lands, except in the following areas:

(i) in the designated Primitive area known as the Gypsum Beds, which is described as Arizona T31N;R20W Portions of sections 2, 3, 10 and 11; and

(ii) in the designated Primitive area known as the Virgin River, which is described as Nevada T36N;R68E Portions of Sections 25, 26, 34, 35, 36; and

(iii) in the designated Primitive/Semiprimitive area in Black Canyon, from the Willow Beach Harbor to Hoover Dam, prohibited from the first Tuesday following Labor Day weekend through Friday of Memorial Day weekend; and prohibited only on Sundays and Mondays from the Sunday of Memorial Day weekend through the Monday of Labor Day weekend, which is described as Nevada T22S;R65E Portions of Sections 32; T23S;R65E Portions of Sections 5, 8, 17, 20, 21, 28, 29, 34; T23½S;R65E Portions of Sections 34; T23S;R65E Portions of Sections 1, 2, and 12. Arizona T30N;R23W Portions of Sections 3, 10, 15, 22, 27, 34; T29N;R23W Portions of Sections 2, 12, 13; T29N;R22W Portions of Sections 18, 19, 20, 29; and

(iv) in the designated Semiprimitive area known as the Muddy River Confluence with Lake Mead (Overton Wildlife Management Area), which is described as Nevada T16S;R68E Portions of Sections 28, 29, 32, 33 and 34 and T17;R68E; and

(v) in the designated Semiprimitive area known as Grand Wash Bay, which is described as Arizona T33N;R16W Portions of Sections 16, 17, 21, 22, 27, 28, 29, 33 and 34, and T32½ N;R16W Portions of Sections 32 and 33; and

(vi) in the designated Semiprimitive area known as Bonelli Bay, which is described as Arizona T31N;R20W Portions of Sections 4, 5, 7, 8, 9, 16, 17, 18, 19, 20, 21, 29 and 30.

(2) A person may not operate a personal watercraft at a speed in excess of flat wake speed within 200 feet of any beach occupied by bathers, boats at the shoreline, or persons in the water or at the shoreline.

(3) After December 31, 2012, no one may operate a personal watercraft that does not meet the 2006 emission standards set by EPA for the manufacturing of two-stroke engines. A person operating a personal watercraft that meets the EPA 2006 emission standards through the use of direct-injection two-stroke or four-stroke engines, or the equivalent thereof, is not subject to this prohibition and will be allowed to operate as described in this section.

(4) The Superintendent may limit, restrict, or terminate access to the areas designated for PWC use after taking into consideration public health and safety, natural and cultural resource protection, and other management activities and objectives.

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_____/Signed/_____ April 9, 2003
Paul Hoffman Date
Deputy Assistant Secretary for Fish and Wildlife and Parks